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no evidence which will warrant our considering that any real departure from the mean form exists.

"The following conclusion is not without its importance: It is impossible to place any dependence on a figure deduced from neighbouring arcs, even within their own limits, as considerable deviations may be caused by the attraction of small masses favourably situated; and the only figure of any geodesical or astronomical importance is that determined as usual from the consideration of a considerable number of arcs situated in various circumstances as regards sources of probable local disturbances."

Extract of a Letter from M. Schwabe to Mr. Carrington.

(*Translated freely.*)

"In the address of the President, contained in your *Monthly Notices*, the question is inadvertently asked, of what led me originally to undertake observations of the sun. It was in consequence of a representation of my old and valued friend Harding of Göttingen, who wrote to me that there was a great want of physical observations of the sun, that the subject presented an almost unworked field, and that labour therein might be rewarded by the discovery of a planet interior to *Mercury*. The communications of Harding and of a friend in Berlin led me also to inquire into the rotation of the sun, in which I found some difficulty from the instability of the spots. Nevertheless, I convinced myself that the opinion of Schroeter, that the spots had an independent motion, was unfounded, and that the apparent movement was attributable rather to the enlarging of one side and the filling in of the other side of a nuclear spot, whereby the estimated centre was shifted. My enumerations, however, early led me to notice a tolerably regular increase and decrease in the number of the spots, so that I may compare myself to Saul, who went out to seek his father's asses, and found a kingdom."

Report of the Syndicate appointed to visit the Observatory of Cambridge (May 30, 1857).

We extract the following passages from this Report:—

"The transit observations in the year 1856 amounted to 1865, and the circle observations to 1121.

"The total number of comparisons in R.A. (with the Northumberland equatoreal), is 695, and of those in N.P.D. 585.

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"The number of occultations of fixed stars by the Moon observed in 1856 was 14.

"On May 30 Professor Challis informed Dr. Peters, the Editor of the *Astronomische Nachrichten*, that it was his intention to observe a limited number of the Minor Planets, and that he had selected the eight following: *Flora*, *Metis*, *Victoria*, *Themis*, *Proserpina*, *Bellona*, *Urania*, and *Leucothea*. A similar selection had previously been made at the Observatories of Washington and Altona, and several other Observatories have since adopted the same plan. It is expected that by this distribution of the work of observing the large number of these bodies now known, needless observations will be avoided, and each body will receive a due amount of attention.

"In July and August of last year repeated attempts were made by Professor Challis and Mr. Breen with the Northumberland telescope to find the planet *Leucothea* at the time of its opposition. The search proved ineffectual in consequence, most probably, of the invisibility of the planet from its small magnitude and low altitude. The efforts of the Berlin astronomers were alike unsuccessful.

"The observations of zodiacal stars and of planets on the meridian have suffered some interruption during the last half-year, owing principally to changes that have taken place in the personal establishment. Keeping still in view the formation of a star-catalogue, Professor Challis proposes to select for especial observation in future the stars that have been employed for comparison in equatoreal observations, for the purpose of preparing for the final reduction of the observations of planets and comets made in past years with the Northumberland telescope. Many of these stars are included in the list of zodiacal stars.

"The equatoreal observations of the minor planets were not restricted to the eight above mentioned, until the beginning of the present year. The others are still observed on the meridian near the times of opposition whenever they can be well seen, and in case ephemerides are provided either in the *Berliner Jahrbuch*, or by the superintendent of the *Nautical Almanac*. The planet *Neptune* is observed as in former years.

"From the commencement of the year to May 22 the number of transit-observations amounts to 430, and the number of circle observations to 287. In these are included 63 transits and 72 circle observations of the following objects: The Sun, *Hebe*, *Parthenope*, *Proserpina*, *Iris* and *Pallas*.

"The Northumberland equatoreal has been employed in the same interval upon the planets *Proserpina*, *Themis*, *Polyhymnia*, *Urania*, *Bellona*, and a new planet discovered by Mr. Pogson, at Oxford, on April 15, and upon two comets, one discovered on February 22 by Professor D'Arrest, and the other on March 18 by Dr. Bruhns. The latter comet has been identified with that discovered by Brorsen in February of 1846, which was diligently searched for by Mr. Breen on its expected return in 1851. It

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